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In the claims:

1. (Currently Amended) A system for communicating information between a downhole location in a wellbore and an uphole location, comprising:

- a. a first device disposed at one of said downhole and said uphole locations, said first device including a transmitter for transmitting a first signal;
- a second device disposed at the other of said downhole and said uphole locations, said second device including a receiver for receiving a second signal; and
- c. at least one repeater disposed at a predetermined location in a wall of the wellbore, said repeater comprising a receiver for receiving said first signal that has been attenuated through a transmission medium, a circuit for amplifying the received signal and a transmitter for transmitting said second signal, wherein said second signal is indicative of said first signal.
- 2. (Currently Amended) The system of claim 1, wherein the the at least repeater comprises:
  - a. a receiving device;
  - b. an electronics module; and
  - e. a transmitting device; and
  - d. an energy source.

- 3.(Currently Amended) The system of claim 1 2, wherein the electronics module comprises eircuits, a processor, and memory, said processor acting that acts according to programmed instructions in-said memory, for controlling an operation of the repeater.
- The system according to claim 2, wherein the 4. (PreviouslyAmended) energy source is one of (i) a battery, (ii) a thermoelectric generator, and (iii) a combination of a battery and a thermoelectric generator.
- 5. (Currently Amended) The system of claim 1, wherein the at least one repeater is adapted to receive and transmit a signal at having a plurality of frequencies.
- 6. (Original) The system of claim 1, wherein the predetermined location is between said downhole location and said uphole location.
- 7. (Currently Amended) The system of claim 1, wherein the at least one repeater is autonomous said uphole location is a surface location.
- 8. (Currently Amended) The system of claim 1, wherein the at least one repeater includes at least one sensor for detecting at least one parameter of interest related to one of: (1) health of the at least one repeater; and a downhole condition.

- 9. (*Previously Amended*) The system of claim 8, wherein the at least one sensor is at least one of (i) a pressure sensor, (ii) a temperature sensor, and (iii) a resistivity sensor.
- 10. (Currently Amended) The system of claim 8, wherein the at least one parameter of interest includes at least one of: (i) wellbore fluid pressure, (ii) wellbore fluid temperature, (iii) wellbore fluid resistivity (iv) formation fluid pressure (v) formation fluid temperature, and (vi) formation fluid resistivity.
- 11. (Currently Amended) The system of claim 1, wherein the first signal and the second signal are at least one of (i) an electromagnetic signal, (ii) a radio frequency signal, end-(iii) an acoustic signal and (iv) a mud pulse signal.
- 12.(Currently Amended) The system of claim 1, wherein the first signal and the second signal each is a wireless signal at least one of (i) an electromagnetic signal, (ii) a radio frequency signal, and (iii) an acoustic signal.
- 13. (Original) The system of claim 8, wherein at least one of the first signal and the second signal includes data related to the at least one parameter of interest.

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- 14. (Currently Amended) A method for communicating information between a downhole location in a wellbore and an uphole location, comprising:
  - a. disposing at least one signal repeater at a predetermined location in a wall of the wellbore;
  - transmitting a first signal from a first device located at one of said uphole location and said downhole location;
  - c. receiving said first signal that has been attenuated through a

    transmission medium at the at least one repeater, amplifying the

    received signal and said repeater transmitting a second signal indicative

    of said first signal; and
  - d. receiving said second signal at the other of said uphole and said downhole locations.
- 15. (Previously Presented) The method of claim 14, further comprising sensing at least one parameter of interest by a sensor.
- 16. (Previously Presented) The method of claim 14, wherein the at least one repeater is disposed in the wall of the wellbore by using an explosive charge.
- 17. (Previously Presented) The method of claim 14, wherein the at least one repeater is disposed in the wall of the wellbore by using a hydraulic device.

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18. (Previously Presented) The method of claim 15, wherein the at least one parameter of interest is at least one of (i) wellbore fluid pressure, (ii) wellbore fluid temperature, (iii) wellbore fluid resistivity (iv) formation fluid pressure (v) formation fluid temperature, and (vi) formation fluid resistivity.

19. (Currently Amended) The method of claim 14, wherein the first signal and the second signal are at least one of (i) an electromagnetic signal, (ii) a radio frequency signal, and (iii) an acoustic signal; and (iv) a mudpulse.

20. (*Previously Presented*) The method of claim 15, wherein the at least one of the first signal and the second signal includes data related to the at least one parameter of interest.

21.(Currently Amended) An apparatus for boosting signals in a communication system in a wellbore, comprising at least one repeater disposed at a predetermined location in a wall of the wellbore, said at least one repeater receiving a first signal that has been attenuated through a transmission medium and transmitting a second boosted signal, wherein said second boosted signal is indicative of said first signal.

- 22. (Currently Amended) The apparatus of claim 21, wherein the repeater comprises at least one of:
  - a. a receiving device;

- b. an electronics module:
- c. a transmitting device; and
- d. an energy source.
- 23. (Currently Amended) The apparatus of claim 22 wherein the electronics module comprises circuits, further comprising a processor that acts, and memory, said processor acting according to programmed instructions in said memory for controlling an operation of the at least one repeater.
- 24. (*Previously Amended*) The apparatus according to claim 22, wherein the energy source is one of (i) a battery, (ii) a thermoelectric generator, and (iii) a combination of a battery and a thermoelectric generator.
- 25. (Currently Amended) The apparatus of claim 21, wherein the <u>at least one</u> repeater is adapted to receive and transmit signals at a plurality of frequencies.
- 26. (Currently Amended) The apparatus of claim 21, wherein the predetermined location is between said downhole location and said uphole location. first signal and second signal are transmitted during drilling of the wellbore.

27. (Currently Amended) The apparatus of claim 21 22, further comprising at least one sensor for detecting at least one parameter of interest related to one of:

(1) a downhole condition and (ii) a health of the at least one repeater.

28. (*Previously Presented*) The apparatus of claim 27, wherein the at least one sensor is at least one of (i) a pressure sensor, (ii) a temperature sensor, and (iii) a resistivity sensor.

29. (Previously Presented) The apparatus of claim 27, wherein the at least one parameter of interest is at least one of (i) wellbore fluid pressure, (ii) wellbore fluid temperature, (iii) wellbore fluid resistivity (iv) formation fluid pressure (v) formation fluid temperature, and (vi) formation fluid resistivity.

30.(Currently Amended) The apparatus of claim 21, wherein the first signal and the second signal are at least one of (i) an electromagnetic signal, (ii) a radio frequency signal, and (iii) an acoustic signal, and (iv) a mud pulse signal.

31. (Currently Amended) The apparatus of claim 21, wherein the first signal and the second signal are wireless signals at least two of (i) an electromagnetic signal, (ii) a radio frequency signal, and (iii) an accustic signal.

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33. (New) The system of claim 1, wherein the at least one repeater includes a plurality of repeaters in the wellbore wherein each repeater in the plurality of repeaters communicates with at least one additional repeater.